

Material Safety Data Sheet



POTASSIUM HYDROXIDE FLAKES

VERSION : 04
DATE OF ISSUE : 01-08-2023
SUPERSEDES : 03

Product Code : 17220

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1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : POTASSIUM HYDROXIDE FLAKES
Product code : 17220
Identification of the product : Potassium hydroxide
CAS No : 1310-58-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3. Details of the supplier of the safety data sheet

Company identification : MOLYCHEM
Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor,
Mumbai – 400 002 (INDIA)
Tel:+91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442.
Email : info@molychem.net
Works: Plot No. B/9, Badlapur M.I.D.C.,OPP.Shobhavat
Textile Co.,Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm)

2. Hazards identification –DSD

2.1. Classification of the substance or mixture

Corrosive to Metals, (Category 1) H290: May be corrosive to metals.
Acute toxicity, (Category 4) H302: Harmful if swallowed.
Skin corrosion, (Sub-category 1A) H314: Causes severe skin burns and eye damage.
Serious eye damage, (Category 1) H318: Causes serious eye damage.

2.2. Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal Word Danger

Hazard Statements

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary Statements

P234 Keep only in original packaging.
P260 Do not breathe dust.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements none

2.3. Other hazards : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3.Composition/information on ingredients

3.1 Substances

Synonyms : Caustic potash
Formula : HKO
Molecular weight : 56.11 g/mol
CAS-No. : 1310-58-3
EC-No. : 215-181-3

Component caustic potash

CAS-No. 1310-58-3
EC-No. 215-181-3
Index-No. 019-002-00-8

Classification

Met. Corr. 1; Acute Tox. 4;
Skin Corr. 1A; Eye Dam.
1; H290, H302, H314,
H318
Concentration limits:
≥ 5 %: Skin Corr. 1A,
H314; 2 - < 5 %: Skin
Corr. 1B, H314; 0,5 - < 2
%: Skin Irrit. 2, H315; 0,5
- < 2 %: Eye Irrit. 2,
H319; ≥ 0,5 %: Met.
Corr. 1, H290;

Concentration

≤ 100 %

4. First aid measures

4.1. Description of first aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

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In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture

Potassium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3. Advice for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Gives off hydrogen by reaction with metals. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

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Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1. Precautions for safe handling

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

No metal containers.

Tightly closed.

Dry. Absorbs carbon dioxide (CO₂) from air.

Air sensitive. strongly hygroscopic

Storage class

Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls/personal protection

8.1. Exposure controls

- Personal protection : Avoid all unnecessary exposure.
- Respiratory protection : Wear approved mask.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : flakes
- Color : white
- Odor : odorless
- Melting point/freezing point : Melting point/ range: 361 °C - lit..
- Initial boiling point and boiling range : 1.327 °C at 1.013 hPa
- Flammability (solid, gas) : The product is not flammable.
- Upper/lower : No data available

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flammability or explosive limits	
Flash point	Not applicable
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	ca.13.5 at 5.6 g/l at 25 °C
Viscosity	Viscosity, kinematic : No data available Viscosity, dynamic : No data available
Water solubility	1.130 g/l at 20 °C - completely soluble
Partition coefficient: n-octanol/water	Not applicable for inorganic substances No data available
Vapor pressure	1 hPa at 719 °C
Density	2.04 g/cm ³ at 20 °C
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	None

9.2. Other information

No data available

10. Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) . Heat of solution is very high, and with limited amounts of water, violent boiling may occur

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Do not heat above melting point.
no information available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

In the event of fire: see section 5

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified

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Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: 13.5 at 25 °C
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: 13.5 at 25 °C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: No data available
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

12. Ecological information

12.1. Toxicity

Toxicity to fish static test LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h
Remarks: (ECOTOX Database)

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

13. Disposal considerations

13.1. Waste treatment methods

No data available

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14. Transport information

14.1. UN number

ADR/RID: - 1813 IMDG : 1813 IATA: 1813

14.2. UN proper shipping name

ADR/RID : POTASSIUM HYDROXIDE, SOLID
IMDG: POTASSIUM HYDROXIDE, SOLID
IATA: Potassium hydroxide, solid

14.3. Transport hazard class(es)

ADR/RID : 8 IMDG : 8 IATA : 8

14.4. Packaging group

ADR/RID : II IMDG : II IATA : II

14.5 Environmental hazards

ADR/RID : no IMDG : Marine pollutant: no IATA : no

14.6 Special precautions for user

Tunnel restriction code : (E)
Further information : No data available

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

16. Other information

Abbreviations and acronyms :

PBT : persistent, bioaccumulative and toxic.


vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Further information : None.

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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